

# Geukensia demissa

## Ribbed mussel, Ribbed horsemussel

### Threat scores

- 1. Ecological impact
  - Toes and probing beaks of California Clapper Rails are frequently caught and clamped between the slightly gaping shells of Geukensia demissa that protrude from the mud
  - An average of one or two chicks per brood were caught by mussels and drowned by the incoming tide
  - Clapper Rails in San Francisco Bay are frequently missing one or more toes, and reported Clapper Rails with Geukensia demissa clamped to their toes or bills
- 2. Invasive potential
  - Planktonic larvae have potential to disperse in water column, expanding invasive range
- 3. Geographic extent
  - Locally pervasive
- 4. Management difficulty
  - No successful eradication methods

# Geukensia demissa Canada, Nova Scotia, off Digby Neck NMR 16952. Actual size 75 mm

### Geography and Habitat

- 1. Native: Southern Gulf of Lawrence to Florida
- 2. Introduced: California
- Habitats
  - Marine, estuaries/bays, intertidal zones, aquaculture
  - Subtidal & intertidal zones in salt marshes, along marsh creeks, occasionally found fouling floating docks
  - Tolerates salinities from nearly freshwater up to 70 ppt
  - Also does well in somewhat polluted water

### **Invasion Pathways**

- 1. Stocking in open water Virginia oysters
- 2. Natural spread planktonic larvae
- 3. Hull/Surface Fouling
- 4. Short-term disturbances that facilitate introduction
- 5. Ballast water and sediments

### Non-Native Locations

- 1. 58- Northern California
- 2. 59- Southern California Bight

### Sources

- 1. Molnar, Jennifer, et al. 2008. "Assessing the global threat of invasive species to marine biodiversity." *Frontiers in Ecology and the Environment*. 6 (9), pp. 485-492.
- 2. http://conserveonline.org/workspaces/global.invasive.assessment
- 3. http://www.nmr-pics.nl/Mytilidae/album/slides/Geukensia%20demissa.jpg